

SAE Handbook, Lesson 2

What are the Different Types of Supervised Agricultural Experiences (SAE)?

Unit. Supervised Agricultural Experience

Problem Area. What are the different types of SAEs?

Student Learning Objectives. As a result of this lesson, the student will...

1. Identify the various types of SAE programs
2. Give three examples of each type of SAE program



Time

Instruction time for this lesson: 50 minutes



Resources:

<http://www.cals.ncsu.edu/agexed/sae/toolbox/index.html>



Tools, Equipment and Supplies

Markers or crayons for coloring
Blank sheets of paper for each student
Writing Surface
Overhead Projector

SAE.2.TM.A-I

SAE.2.AS.A

SAE.2.Assess

SAE.2.PPT (A PowerPoint presentation containing the key materials in the lesson is also available.)



Key Terms

The following terms are presented in this lesson and appear in bold italics:

- ***Service Learning***
- ***Entrepreneur***
- ***Placement***



Interest Approach



Activity

Have blank sheets of paper available for each student along with markers or crayons.



What did you eat at your last meal? Is that your favorite food? Take a sheet of paper and draw a picture of your favorite food. You will have 3 minutes.

After three minutes have the students share their drawings. Ask various students what it is they like about the food item they drew. Is it the taste, texture or what? Emphasize that different people have different likes and dislikes.



In our last class, we discussed what an SAE was and the benefits of having an SAE. Who can remember some of the benefits of having an SAE? Today we will learn about the different types of SAEs. Just as there are various choices in what we eat, there are various choices in the type of SAE we can have.

Summary of Content and Teaching Strategies

OBJECTIVE 1: Identify the various types of SAE programs



There are several different categories of SAE. We will discuss each category and give examples of each type of SAE. Before we do that, who thinks they can describe any of the categories of SAE and give an example?

Encourage students to speculate about the categories of SAE and give examples of each.

Display SAE.2.TM.A. and discuss

I. Types of SAE Programs

- A. Entrepreneurship
- B. Placement
- C. Agriscience Research
- D. Agricultural Service Learning
- E. Exploratory
- F. Improvement
- G. Supplemental
- H. Directed School Laboratory

Display SAE.2.TM.B

I. Entrepreneurship

The student plans, implements, operates and assumes financial risks in a farming activity or agricultural business. In Entrepreneurship programs, the student owns the materials and other required inputs and keeps financial records to determine return to investments.

II. Entrepreneur

A student with an Entrepreneurship SAE program is known as an Entrepreneur.

An **Entrepreneur** is someone who is willing to assume the responsibility, risk and rewards of starting and operating a business.

III. Entrepreneurship examples:

- A. Growing an acre of corn
- B. Operating a Christmas tree farm
- C. Raising a litter of pigs
- D. Running a pay-to-fish operation
- E. Owning and operating a lawn care service
- F. A group of students growing a crop of poinsettias

Discuss the visual. Call on several students to give other examples of entrepreneurship.

Display SAE.2.TM.C.

I. Placement

Placement programs involve the placement of students on farms and ranches, in agricultural businesses, or in community facilities to provide a “learning by doing” environment. This is done outside of normal classroom hours and may be paid or non-paid.

II. Placement Examples

- A. Placement in a florist shop
- B. Working after school at a farm supply store
- C. Working on Saturdays at a riding stable
- D. Placement on a general livestock farm

Discuss the visual. Call on several students to give other examples of placement activities.

Display SAE.2.TM.D.

I. Agriscience Research

Agriscience Research consists of an extensive activity where the student plans and conducts a major agricultural experiment using the scientific process.

The purpose of the research is to provide “hands-on” experience in:

- 1. Verifying, learning or demonstrating scientific principles in agriculture
- 2. Discovering new knowledge
- 3. Using the scientific process



II Agriscience Research Examples

- A. Comparing the effect of various planting media on plant growth
- B. Determining the impact of different levels of protein on fish growth
- C. Comparing three rooting hormones on root development
- D. Determining if phases of the moon have an effect on plant growth
- E. Analyzing the effectiveness of different display methods on plant sales in a garden center
- F. Demonstrating the impact of different levels of soil acidity on plant growth
- G. Determining the strength of welds using different welding methods

Discuss the visual. Call on several students to give other examples of agriscience research activities.

Display SAE.2.TM.E.

I. Agricultural Service Learning

Service learning combines community service with a structured, school-based opportunity for reflection about that service, emphasizing the connections between service experiences and what is taught in the agriculture class.

Typically, the end product of an Agricultural Service Learning SAE is to make the community in which the students live better.

II. Examples of Agriculture Service Learning

- A. Test water wells in the community for pesticide contamination
- B. Build a nature trail for use by the community
- C. Design and install a landscape plan for a church
- D. Build and erect wood duck nest boxes
- E. Tutor a student who has reading problems

Discuss the visual. Call on several students to give other examples of agricultural service learning activities.



What is considered to be an SAE varies from state to state. Some states recognize other categories such as Exploratory, Directed School Laboratory, Improvement and Supplementary. Some of these activities may be considered “minor” SAE components but combined could constitute an SAE program.

Display SAE.2.TM.F.

I. Exploratory

Exploratory SAE activities are designed primarily to help students become literate in agriculture and/or become aware of possible careers in agriculture. Exploratory SAE activities are appropriate for beginning agricultural students but are not restricted to beginning students.

II. Exploratory Examples

- A. Observing and/or assisting a florist
- B. Growing plants in a milk jug “greenhouse”
- C. Assisting on a horse farm for a day
- D. Interviewing an agricultural loan officer in a bank
- E. Preparing a scrapbook on the work of a veterinarian
- F. Attending an agricultural career day

Discuss the visual. Call on several students to give other examples of exploratory activities.

Display SAE.2.TM.G.

I. Directed School Laboratory

Students apply skills they have learned in laboratories provided by the school

- A. Land labs
- B. Aquaculture labs
- C. Ag mechanics labs
- D. Greenhouses

II. Directed School Lab Examples

- A. Growing bedding plants in the school greenhouse
- B. Caring for an aquarium of fish
- C. Taking care of livestock on the school farm
- D. Working in the school greenhouse after school and on weekends and holidays

Discuss the visual

Display SAE.2.TM.H.

I. Improvement

Improvement activities include a series of learning activities that improves the value or appearance of the place of employment or home, the efficiency of an enterprise or business, or the living conditions of the family. An improvement activity involves a series of steps and generally requires a number of days for completion.

II. Improvement Examples:

- A. Landscaping the home
- B. Building a fence
- C. Overhauling a piece of equipment
- D. Building or reorganizing a farm shop
- E. Renovating and restocking a pond
- F. Computerizing the records of an agricultural business

Discuss the visual. Call on several students to give other examples of improvement activities.

Display SAE.2.TM.I.

I. Supplementary

A **Supplementary** activity is one where the student performs one specific agricultural skill outside of normal class time. This skill is not related to the major SAE but is normally taught in an agricultural program, involves experiential learning and does contribute to the development of agricultural skills and knowledge on the part of the student. The activity is accomplished in less than a day and does not require a series of steps.

II. Supplementary Examples:

- A. Pruning a fruit tree
- B. Changing oil in a sod cutter
- C. Balling & burlapping a tree
- D. Cutting firewood with a chain saw
- E. Staking tomatoes
- F. Fertilizing a lawn

Discuss the visual. Call on several students to give other examples of supplementary activities.

OBJECTIVE 2: Give three examples of each type of SAE program



Activity



Now that we know what the different types of SAE programs are, let's brainstorm about possible SAE programs. Get with a partner and see if you can identify an example of each type of SAE that could be conducted in this community. Use the activity sheet that I have provided to record your answers. You have five minutes for this activity.

Pass out SAE.2.AS.A to the students. Walk around the room as they work on this activity. After 5 minutes have each group of students report.



Review/Summary

It is time for students to start thinking about the type of SAE they might have.



Earlier in class each of you identified your favorite food. Now we are going to see what you think your favorite type of SAE might be. This may change in the future. We are going to go around the room and have each of you tell what you think might be your favorite type of SAE at this moment.

Go around the room and have each student tell which type of SAE they are leaning toward and why.



Application

Extended Classroom Activity:

Have students get in front of the class and pantomime an action they might perform in their SAE program.

FFA Activity:

Have students identify three possible Agricultural Service Learning projects that would be appropriate for the FFA chapter in the local community.

SAE Activity:

Have the student make a list of three possible SAE activities and rank them.

Evaluation

SAE.2.Assess

Answers to Assessment:

1. E
2. C
3. A
4. F
5. H
6. D
7. B
8. G

Types of SAE Programs

Entrepreneurship

Placement

Agriscience Research

Agricultural Service Learning

Exploratory

Improvement

Supplemental

Directed School Laboratory

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